SNF Stabilization and Disposition (RL-0012)

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Calibration of the water temperature switches at the Cold Vacuum Drying Facility in preparation for Multi-Canister Overpack processing restart

Overview

This section addresses work in Project Baseline Summary (PBS) RL-0012, *Spent Nuclear Fuel (SNF) Stabilization and Disposition.*

NOTE: Unless otherwise noted, all information contained herein is as of the end of October 2007.

Notable Accomplishments

SNF Stabilization and Disposition (PBS RL-0012)

K East Deactivation and Decommissioning (D&D) Project

- Placed K East Basin grout.
- Completed three Fuel Transfer System (FTS) shipments to K West Basin.
- Completed K East Basin high dose debris inspection and placement.
- Completed relocation of construction lay-down area.
- Initiated procurement of support trailers and facilities.

Hose In Hose (HIH) Transfer –

- Drained the HIH line in preparation for D&D.

K West Basin Floor and Pit Sludge Retrieval (FPSR)

- Disassembled Primary Process Table components in preparation for removal of tops.
- Received FTS shipments of debris bins, canisters, and fuel canister from K East Basin.
- Relocated West Secondary Process Table.
- Loaded approximately one ton of pole tool debris into IP2 container, and removed IP2 container from the K West Transfer Bay.

Legacy Fuel

- Completed 85 percent of procedure revisions for fuel processing restart.
- Completed 50 percent of Cold Vacuum Drying Facility (CVDF) preventative maintenance for fuel processing restart.

Sludge Treatment Project (STP)

- Completed Programmatic Work Plan for Critical Decision (CD)-1.
- Submitted the Functional Requirements Document to RL.
- Initiated drafts of sludge retrieval subsystem process flow diagrams, process description documents, and functions and requirements.
- Completed the Settler Tank Mock-up field test.

Issues

SNF Stabilization and Disposition (PBS RL-0012)

K Basins Closure Project

- Resolution of trolley repair and or replacement.
- Transfer/priority of personnel required for Final Pass and Fuel Operations.
- Greater than planned quantity of debris for sorting.
- Plan for CERCLA waste shipments to the Environmental Restoration and Disposal Facility (ERDF).

STP

- CCP contracted with the Waste Isolation Pilot Plant (WIPP); liaison impacts design.
- Establishing a WIPP Certified Lab at Hanford.
- Addressing potential for new Remote Handled Transuranic (RH-TRU) Storage Facility.

FY 2008 Funds vs. Spend Forecast (\$M)

	Projected FY 2008 Funding	FY 2008 Fiscal Year Spending Forecast	Variance
SNF Stabilization & Disposition	\$ 106.4	\$ 97.2	\$ 9.2

Schedule/Cost Performance (\$M)

SNF Stabilization & Disposition	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion (FY08/ CTD)
Current Period (Month)	\$5.4	\$6.5	\$5.0	\$1.1	20.5%	\$1.5	23.5%	\$77.8
Cumulative-to-Date (FY 2004 - Present)	\$504.6	\$500.0	\$573.0	-\$4.6	-0.9%	-\$73.1	-14.6%	\$576.9

Numbers are rounded to the nearest \$0.1M and include the closure services allocation.

- CTD Schedule Performance (-\$4.6M/-0.9%): Unfavorable SV is due to delays in Legacy Fuel work scope and K East to K West Sludge Transfer system D&D; delays approving Authorization Basis (AB) changes and coordination with other D&D activities. Delays in K East D&D are pending implementation of baseline update reflecting implementation of value engineering actions. Delays in the Sludge Treatment Project in design review, procurement, and construction activities are due to the decision to implement the CD process into design requirements.
- CTD Cost Performance (-\$73.1M/-14.6%): The unfavorable CV is primarily due to problems encountered
 in design, implementation, startup, and operation of spent fuel removal, sludge containerization, and transfer
 systems. System complexity and requirements were underestimated. Most of the cost variances were
 incurred prior to FY 2006.

Performance Analysis CTD and Monthly (\$M)



Milestone Achievement

Number	Milestone Title	Type (TPA/PI/ DNFSB)	Due Date *	Actual Date	Forecast Date	Status / Comments
M-034-33B (S10-05-018)	Complete K East Sludge Containerization	TPA	03/01/05	10/20/06		Complete
DNFSB 119E (S10-05-014)	Complete K East Bulk Sludge Consolidation	DNFSB	10/31/06	10/20/06		Complete
M-034-34 (S10-05-010)	Complete Removal of K East Sludge	TPA	05/31/07	05/31/07		Complete
DNFSB 120E (S10-05-015)	Complete K East Basin Containerized Sludge Removal	DNFSB	05/31/07	05/31/07		Complete
DNFSB 122E	K East Final Pass Sludge Removed	DNFSB	05/31/07	05/31/07		Complete
M-034-35a (S10-05-011)	Containerize K West Bulk Sludge	TPA	07/31/07	07/03/07		Complete
DNFSB 119W (S10-05-016)	Complete K West Bulk Sludge Containerization	DNFSB	07/31/07	07/03/07		Complete
M-034-35b (S10-05-011)	Complete K West Final Pass	TPA	01/31/08		01/08/08	Ahead of Schedule

^{*} DNFSB dates reflect Implementation Plan update, TPA dates reflect change package M-34-05-04, forecast dates are current working level schedules.